Technical Disclosure Commons

Defensive Publications Series

March 27, 2019

ROTARY PUSHBUTTONS WITH SPRING-LOADED ROTARY AXIS

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Technical task:
Rotational mounted pushbuttons have a rigid axis of rotation.

Initial situation:
The closer you push/actuate to the axis of rotation, the higher the actuating force.

Solution:
The new idea consists of a spring-loaded rotary axis.

A rotatory key guidance is known from the state of the art. Now the rotary axis is given a degree of freedom in the direction of actuation. The return is effected by a reset element (e.g. spring). If an operation is now carried out at position (1.), the control element behaves like a classic control unit with a rotary key guide. When actuating at position (2.), the key cap is now moved almost uniformly in the actuating direction (depending on the spring constants of the two reset elements).

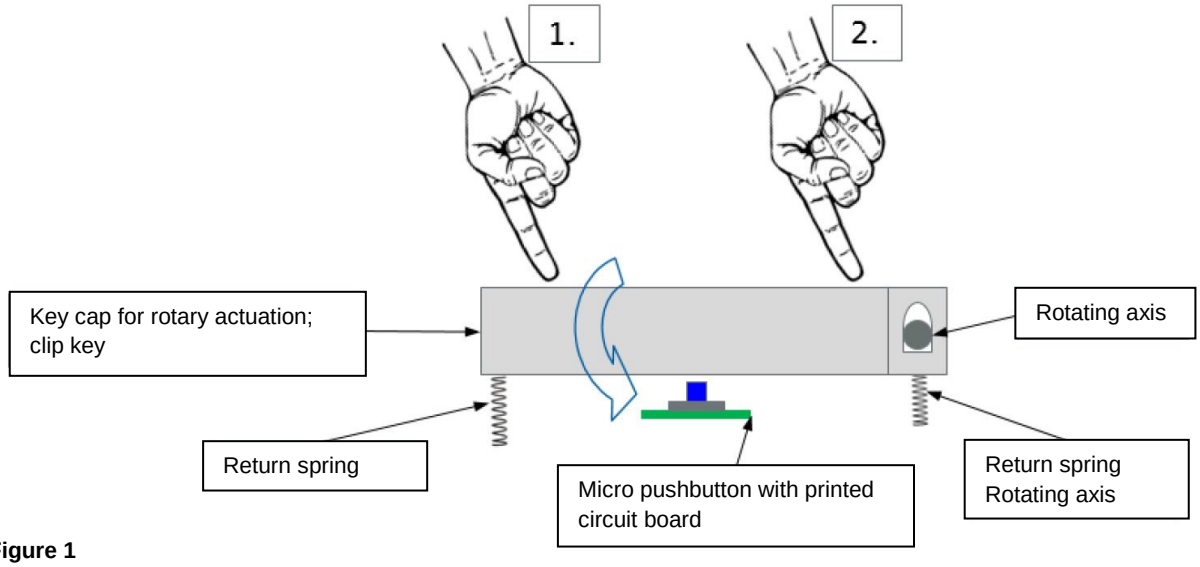

Figure 1

Advantages:

- Combines the advantages of a rotary key guide and a tranlatory key guide.
- Precise key guidance with even force distribution during operation.